

QUALCOMM suggests that the streamlined procedure include a shortened public notice period. For example, a 700 MHz licensee would electronically file the required showing, as an engineering study attached to a Form 601.⁴⁰ Fourteen days after the Form 601 appears on Public Notice, comments would be due. If no comments are filed, the next weekly Public Notice would reflect acceptance of the engineering study showing. At that point the 700 MHz license would be free to begin operations.

The Commission uses this type of streamlined procedure for assignment applications in wireless services.⁴¹ Here, the streamlined procedure would only apply if the 700 MHz licensee filed an engineering study using the OET-69 methodology and demonstrating that potential interference would be *de minimis*.

In the case of markets in which a 700 MHz licensee seeks a waiver of the Commission's rules in reliance on such an OET-69-based engineering study, we believe that, where no comments have been received, the Commission could include grant of the waiver request in the Public Notice accepting the Section 27.60 engineering study.⁴²

Of course, where objections have been received, these streamlined procedures would not apply. In those cases, QUALCOMM believes that the public interest requires that the Commission establish a rebuttable presumption in favor of the OET-69 showing. The Commission took a similar step in establishing a presumption favoring grant of voluntary

⁴⁰ See *supra* at n. 24.

⁴¹ See *Federal Communications Bar Association's Petition for Forbearance from Section 310(d) of the Communications Act Regarding Non-Substantial Assignment of Licenses and Transfers of Control Involving Telecommunications Carriers Licensed by the Wireless Telecommunications Bureau*, 13 FCC Rcd 6293 (1998).

⁴² QUALCOMM recognizes the anomaly inherent in a "streamlined" waiver request. However, in view of the Commission's decision to require waiver requests in the *Access Spectrum Order*, it seems necessary to suggest a procedure which will reduce the administrative burden associated with that decision.

agreements for band clearing in the *Upper 700 MHz Reconsideration Order*.⁴³ In that case, the Commission decided that it would presume the public interest is substantially furthered when an applicant demonstrates that grant of the application would result in specific benefits and avoid specific detriments. The Commission identified those benefits as when the request would

- (1) make new or expanded wireless service, such as “2.5” or “3G” services, available to consumers;
- (2) clear commercial frequencies that enable provision of public safety services; or
- (3) would result in the provision of wireless service to rural or other underserved communities.⁴⁴

The applicant would also have to show that grant of the request would not result in any one of the following:

- (1) the loss of any of the four stations in the designated market area (“DMA”) with the largest audience share;
- (2) the loss of the sole service licensed to the local community; or
- (3) the loss of a community’s sole service on a channel reserved for noncommercial educational broadcast service.⁴⁵

In establishing this presumption for the Upper 700 MHz Band, the Commission concluded that it was consistent with Congressional objectives, should generally increase the attractiveness of the spectrum to potential 700 MHz licensees, and will facilitate the expeditious

⁴³ *Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission’s Rules*, 15 FCC Rcd 20845 (2000). (*Upper 700 MHz Reconsideration Order*)

⁴⁴ *Upper 700 MHz Reconsideration Order* at ¶ 61.

⁴⁵ *Id.*

transition to DTV without undue loss of broadcast service.⁴⁶ QUALCOMM believes that similar objectives apply to the Lower 700 MHz Band. Moreover, we believe that similar benefits and detriments apply. The benefit of introducing new or expanded wireless services, such as MediaFLO, certainly outweighs the possibility of interference temporarily affecting less than 2% of a station's service population.

Moreover, this presumption would not be conclusive. There may be cases where a 700 MHz licensee's engineering study shows a *de minimis* impact on broadcast service, but special or unique factors compel the Commission to find that the presumption has been rebutted. In those cases, the Commission would consider all of the public interest factors involved and make a decision whether or not to approve the request based on those individual factors.

QUALCOMM believes that establishing a streamlined processing procedure for Section 27.60 showings will accelerate the deployment of new 700 MHz services, will increase the value of the spectrum, and will reduce the administrative burden on the Commission, without substantially affecting the provision of broadcast service.

⁴⁶ *Id.*

IV CONCLUSION

QUALCOMM believes that the Commission should declare that: (1) OET-69 is an acceptable methodology for demonstrating compliance with the TV/DTV interference protection criteria of Section 27.60; (2) a *de minimis* threshold of 2% is established as the acceptable standard for interference; and (3) streamlined procedures and a rebuttable presumption in favor of 700 MHz operations be established. Such a declaration will serve the public interest by bringing new and innovative wireless services to the marketplace, while causing only a *de minimis* and temporary impact on broadcast service.

Respectfully submitted,

QUALCOMM Incorporated

By



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Its Attorneys

Dated: January 10, 2005

ATTACHMENT A

TechWare, Inc.

DECLARATION OF WILLIAM MEINTEL

I, William Meintel, under penalty of perjury, hereby declare and state as follows:

I am an officer in the firm of TechWare, Inc. with offices at 14101 Parke Long Court, Suite 206, Chantilly, Virginia, 20151.

I have been instrumental in the development of the computer software currently being used by the Federal Communications Commission (FCC) for the calculation of interference between television (TV), digital television (DTV), low power television (LPTV) and Class A TV assignments. This software is commonly referred to as "TV Process" and "OET-69".

I have been engaged in communications and computer software business for more than 35 years. My qualifications are a matter of record with the Federal Communications Commission (FCC).

The firm of TechWare, Inc. has been requested by Qualcomm, Inc. to provide its opinion concerning possible modifications to the FCC's "TV Process (OET-69)" software to accommodate interference calculations from Part 27 stations operating in the 700 MHz bands.

It is my opinion that software code changes can be made to add a service class to distinguish Part 27 entries from television (TV), digital television (DT), LPTV (TX), and Class A TV (CA) entries. Perhaps something like "27" could be employed for the Part 27 service class.

The Part 27 entry could be treated similarly to a DTV entry except for software code changes to account for the differences in desired-to-undesired (D/U) interference ratios, as described below.

Co-channel Part 27 to TV D/U ratio 40 dB

Co-channel Part 27 to DTV D/U ratio 23 dB [there will be no variation of this D/U ratio depending on the DTV S/N ratio as indicated by Section 73.623(c)(3)(i) of the FCC rules]

**14101 Parke Long Court - Suite 206
Chantilly, Virginia 20151-1645
Phone: 703-222-5842 FAX: 703-222-5843**

Adjacent channel Part 27 to TV D/U ratio 0 dB

Adjacent channel Part 27 to DTV D/U ratio -23 dB

No consideration would be given for interference calculations to analog TV assignments on "taboo" channels.

No consideration would be given to LPTV assignments.

No consideration would be given to Class A TV assignments.

In situations where more than one Part 27 transmitter is proposed in a single local TV market, the fields from each transmitter could be summed in a Root-Sum-Square method to account for the additive effects of multiple transmitters.

The calculated new or unique interference caused by the Part 27 entry to full service TV and DTV stations could be evaluated for meeting a "2% maximum" test. The Part 27 entry could be further evaluated so that the cumulative interference caused to a full service TV and DTV entry does not increase if it already receives more than 10% calculated interference.

It is my opinion that the software changes to "TV Process (OET-69)" to accommodate interference calculations from Part 27 stations as described above, can be accomplished within 60 days.

The above statement has been prepared by me personally or under my direction. All facts contained therein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true.

Signed and dated this 16th day of December, 2004.

✓ William R. Meintel
Digitally signed by William R. Meintel
DN: cn=William R. Meintel,
o=TechWare, Inc., c=US,
Date: 2005.01.20 11:06:11
+0500
Signature valid
William Meintel
President
TechWare, Inc.

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ATTACHMENT B

**ENGINEERING EXHIBIT
PREPARED FOR QUALCOMM INCORPORATED
IN SUPPORT OF A PETITION FOR DECLARATORY RULING
THAT OET-69 METHODOLOGY IS ACCEPTABLE
TO DEMONSTRATE COMPLIANCE WITH SECTION 27.60
OF THE FEDERAL COMMUNICATIONS COMMISSION'S RULES**

Engineering Statement

This engineering exhibit has been prepared on behalf of QUALCOMM Incorporated in support of a Petition for Declaratory Ruling requesting that the Federal Communications Commission declare that the methodology of OET Bulletin No. 69 (OET-69), with minor modifications as proposed herein, is an acceptable engineering methodology to demonstrate compliance with the TV/DTV interference protection criteria of Section 27.60 of the Commission's Rules for QUALCOMM's MediaFlo™ service, which QUALCOMM plans to deploy on the Lower 700 MHz D-Block.¹

Since QUALCOMM's MediaFlo™ transmitters will operate under Part 27 and not Part 73 of the FCC Rules, QUALCOMM proposes minor modifications to the OET-69 methodology to permit evaluation of its Part 27 transmitting stations. This exhibit describes pertinent characteristics of QUALCOMM's MediaFlo™ transmission system, outlines the proposed modifications to the OET-69 methodology to accommodate Part 27 licensees, and provides three example engineering studies using the modified OET-69 methodology as proposed herein.

QUALCOMM's MediaFlo™ System Characteristics

QUALCOMM's FLO™ (Forward Link Only) technology is a transmission-only service to mobile receivers. It includes no mobile transmitters. Furthermore, the MediaFlo™ transmitting stations are designed to be widely spaced and cover large geographic areas. The MediaFlo™ emissions characteristics are DTV-like in nature with an occupied bandwidth between 5.5 and 6 MHz centered in the channel.

In congested markets, more than one MediaFlo™ transmitting station may be deployed. QUALCOMM proposes a Root-Sum-Square (RSS) method of summing undesired fields from multiple MediaFlo™ transmitters located within the same local market.

¹ The Lower 700 MHz D-Block contains the spectrum from 716 to 722 MHz and coincides with present television channel 55.

Proposed Modifications to OET-69 Methodology

OET-69 describes a methodology for evaluating service from and interference to broadcast television stations. It is divided into three parts: a methodology for evaluation of service, a methodology for evaluation of interference and a description of the FCC Longley-Rice computer program. QUALCOMM proposes no changes to the first part of OET-69. It proposes only minor changes to the second and third parts of OET-69.

Part 1: Evaluation of Service

QUALCOMM does not propose any changes to the current OET-69 methodology of evaluating television station service. It does not propose creation of a new class of service for Part 27 licensees, and therefore there is no need to establish a method of determining service for Part 27 stations.² QUALCOMM's proposed changes only impact evaluation of interference.

Part 2: Evaluation of Interference

QUALCOMM proposes four minor modifications to the OET-69 methodology of evaluating interference so as to permit evaluation of interference from Part 27 stations. These minor modifications provide a method for evaluating interference to full-service analog and digital television stations operating on channels 54, 55, and 56 during the remainder of the DTV Transition Period. At the end of the DTV Transition Period, these analog and digital television stations will vacate these channels and there will be no more need for evaluation of interference to them.

The proposed changes to the OET-69 methodology of evaluating interference are as follows:

1. For Part 27 stations, the D/U ratios for co-channel and adjacent-channel protection of broadcast stations will be modified to reflect the D/U ratios contained in Section 27.60.
2. For Part 27 stations the D/U ratio for determining co-channel interference to DTV service will be +23 dB at all locations and will not be adjusted based on the signal-to-noise ratio of the DTV signal.
3. In accordance with Section 27.60, no consideration will be given to taboo-channel interference to analog television stations.
4. Where multiple Part 27 transmitting stations are to be deployed in a local broadcast market, a Root-Sum-Square (RSS) summation of undesired fields from individual Part 27 transmitting stations will be used to establish the "worst-case" interfering signal in each grid evaluated.

A discussion of the proposed changes to the OET-69 methodology follows.

The first proposed change is to adopt the D/U ratios of Section 27.60 for evaluation of interference from Part 27 transmitting stations. It is noted that the co-channel and

² QUALCOMM does not seek protection from full service TV and DTV station interference.

adjacent-channel D/U ratios contained in Section 27.60 are greater than those contained in OET-69 for all cases except co-channel, non-offset analog into analog TV. A comparison of the D/U ratios is contained in the following table.

Relationship	Undesired Signal Type		
	Analog TV	Digital TV	Proposed Part 27
Co-channel into desired DTV	+2	+15	+23
Co-channel into desired analog TV	+28 (offset) +45 (non-offset)	+34	+40
Lower adjacent channel into desired DTV	-48	-28	-23
Lower adjacent channel into desired analog TV	-3	-14	0
Upper adjacent channel into desired DTV	-49	-26	-23
Upper adjacent channel into desired analog TV	-13	-17	0

The second proposed change relates to the adjustable D/U ratio for determining co-channel interference to DTV service found in Section 73.623 of the Commission's Rules. For co-channel analog TV into DTV the D/U ratio varies from +2 dB at locations where the DTV service signal-to-noise ratio is 25 dB or greater to as great as +21 dB where the DTV service signal-to-noise ratio is 16 dB. For co-channel DTV into DTV the D/U ratio varies from +15 dB where the DTV service signal-to-noise ratio is 28 dB or greater to as great as +23 dB where the DTV service signal-to-noise ratio is 16 dB. QUALCOMM proposes a flat +23 dB D/U ratio, which matches the D/U ratio contained in Section 27.60 and is the "worst-case" D/U ratio for co-channel interference to DTV service presently in OET-69.

Since Section 27.60 does not prescribe consideration of taboo-channel interference to analog TV service during the DTV Transition Period, QUALCOMM proposes that taboo-channel interference from Part 27 transmitters to analog TV service not be considered in the modified OET-69 methodology.

Finally, with respect to the fourth proposed change, QUALCOMM may require more than one MediaFlo™ transmitter in certain local markets. To evaluate the combined interference impact from multiple transmitters in the same local market, QUALCOMM proposes use of an RSS method of summing predicted fields from multiple transmitters. The RSS method provides a "worst-case" prediction of the combined interference effects by assuming that the fields from the individual transmitters add in all cases (when in fact they may cancel in some cases).³ Adding the RSS method of determining the combined

³ The interfering fields from each MediaFlo™ transmitter, in dBμV/m, in each OET-69 grid would be converted to their corresponding linear values in μV/m, squared, then summed, and the square root of the sum taken to get the "worst-case" combined field in μV/m. This "worst-case" combined field would then be converted back into logarithmic form in dBμV/m and tested to determine whether it meets the required D/U ratio.

interference from multiple transmitters should be a relatively easy modification to the OET-69 software.

QUALCOMM proposes that evaluation of new interference from proposed Part 27 transmitting stations proceed as follows. Determination of interference from analog and DTV stations will be performed first in accordance with the existing implementation of the OET-69 methodology. Then interference from proposed Part 27 transmitting stations will be evaluated. A Part 27 station will not be considered to cause new interference at locations where there is no service or in places where interference from analog or DTV stations already exists. The calculated new interference caused by a proposed Part 27 transmitter (or transmitters) to full service TV and DTV stations will be evaluated for meeting a "2% maximum" test. This "2% maximum" test will be applied on a local television market (DMA) basis. Proposed Part 27 transmitter(s) in a local market cannot create new interference to more than 2% of any full service TV or DTV station service population (defined to be a station's service population not affected by terrain losses). Any Part 27 proposal will be further evaluated to determine that the cumulative interference caused to a full service TV or DTV station could not increase if it already receives more than 10% calculated interference.

Part 3: The FCC Longley-Rice Computer Program

To facilitate evaluation of interference from Part 27 transmitting stations, QUALCOMM proposes that minor modifications be made in the FCC Longley-Rice computer program. PCCI has modified its own implementation of the program to evaluate interference from MediaFlo™ transmitting stations in accordance with the changes in evaluation of interference as described above. Sample output from the modified program is shown below.

Analysis of DTV Station, Channel 55		
	Area (sq km)	Pop
within Noise Limited Contour	17688.56	6939790
not affected by terrain losses	17161.35	6744121
Interference Summary		

lost to NTSC IX	138.43	21912
lost to additional IX by DTV	490.89	93344
lost to additional IX by P27	18.65	3839
lost to all IX	647.97	119095

Examples of Evaluation of MediaFlo™ Proposals Under the Modified OET-69 Methodology

For the purpose of demonstrating the evaluation of MediaFlo™ transmitters under the proposed, modified OET-69 methodology, PCCI modified its implementation of the

OET-69 software to reflect the changes as proposed above. Three example markets were evaluated under the modified OET-69 software: Phoenix, New Orleans and Oklahoma City. The Phoenix market involves a proposed MediaFlo™ transmitter to be nearly collocated with an existing, upper adjacent-channel DTV station. The New Orleans market involves a proposed MediaFlo™ transmitter located approximately 34 km from a lower adjacent-channel analog TV station and within the station's Grade B contour. The Oklahoma City market involves two MediaFlo™ transmitters located outside the service contours of all incumbent co-channel and adjacent-channel TV and DTV stations. All three analyses were run using 1 km grid squares, 1 km terrain increments and population data from the 2000 U.S. Census.

Figure 1 contains our analysis of the Phoenix market. Sheet 1 of Figure 1 contains pertinent technical parameters for the proposed MediaFlo™ transmitter and a listing of incumbent TV and DTV stations studied; only upper adjacent-channel DTV station, KNXV-DT, channel 56, licensed to Phoenix requires study. Sheet 2 of Figure 2 is a map showing the equivalent Grade B contours [41 dBμ F(50,90) contour] of the licensed and authorized KNXV-DT facilities and the predicted 64 dBμ undesired contour for the proposed MediaFlo™ transmitter. Since the MediaFlo™ transmitter site is nearly collocated with KNXV-DT, it cannot provide contour protection to KNXV-DT. Sheets 3 and 4 contain the results of the interference analysis performed using the modified OET-69 software. When studied under the revised OET-69 methodology, the proposed MediaFlo™ transmitter meets the interference criteria. Out of a total service population of 3,208,942 for the licensed KNXV-DT facility, the MediaFlo™ transmitter is predicted to cause interference to 14,177 persons (0.44 percent). Out of a total service population of 3,227,535 for the authorized (CP) KNXV-DT facility, the MediaFlo™ transmitter is predicted to cause interference to only 2,895 persons (0.09 percent).

Figure 2 contains our analysis of the New Orleans market. Sheet 1 of Figure 2 contains pertinent technical parameters for the proposed MediaFlo™ transmitter and a listing of incumbent TV and DTV stations studied. Two TV and two DTV stations require study in this market. Sheet 2 of Figure 2 is a map showing the Grade B contours of the TV stations, the equivalent Grade B contours of the DTV stations and the pertinent interfering contours of the proposed MediaFlo™ transmitter. The proposed MediaFlo™ transmitter provides contour protection to upper adjacent-channel station KLFY-DT, but co-channel stations WBPB-TV and WAKA-DT and lower adjacent-channel station WUPL-TV require further study. Sheets 3 through 6 contain the results of the interference analysis performed using the modified OET-69 software. When studied under the revised OET-69 methodology, the proposed MediaFlo™ transmitter meets the proposed interference criteria to all three of these stations. Study results are summarized in the following table.

Desired Station	Service (Population Not Affected by Terrain Losses)	Population Subject to New Interference from Proposed MediaFlo™ Transmitter	Population Subject to New Interference as Percentage of Service
WUPL (LIC)	1,424,059	3,674	0.26%
WBPB (LIC)	931,112	1,361	0.15%
WAKA (CP)	703,621	0	0.00%

Figure 3 contains our analysis of the Oklahoma City market. Sheet 1 of Figure 3 contains pertinent technical parameters for the two proposed MediaFlo™ transmitters and a listing of incumbent TV and DTV stations studied. One TV and two DTV stations require study in this market. Sheet 2 of Figure 3 is a map showing the Grade B contours of the TV stations, the equivalent Grade B contours of the DTV stations and the pertinent interfering contours of the proposed MediaFlo™ transmitters. The proposed MediaFlo™ transmitters provide contour protection to upper adjacent-channel station KJRH-DT, but co-channel stations KLDI(TV) and KOTV-DT require further study. Sheets 3 through 6 contain the results of the interference analysis performed using the modified OET-69 software using the RSS method (as described above) to calculate the undesired field from the combination of the two proposed MediaFlo™ transmitters. When studied under the revised OET-69 methodology, the proposed MediaFlo™ transmitters meet the proposed interference criteria to all of these stations. Study results are summarized in the following table.

Desired Station	Service (Population Not Affected by Terrain Losses)	Population Subject to New Interference from Proposed MediaFlo™ Transmitter	Population Subject to New Interference as Percentage of Service
KOTV-DT (CP)	1,240,879	23,031	1.86%
KLDI-TV (LIC)	4,721,607	0	0.00%
KLDI-TV (CP)	5,194,129	0	0.00%

Louis R. duTreil, Jr.

David E. Dickmann

December 17, 2004

Service and Interference Analysis
MediaFlo™ Phoenix, AZ

Proposed Station

MediaFlo PHOEGS
Phoenix, AZ
Channel 55
Site Coordinates: 33-19-57 / 112-03-56
Antenna Type: Non-DA
Effective Radiated Power: 50 kW
Antenna Radiation Center: 840 m AMSL

Broadcast Stations Considered in Analysis

Call Sign	Status	Channel	Service	Community	State	Antenna Type	Latitude	Longitude	ERP (kW)	RCAMSL (m)	Bearing (deg T)	Distance (km)
KNXV-DT	LIC	56	DT	PHOENIX	AZ	ND	33-20-00	112-03-46	73	866	70.2	0.3
KNXV-DT	CP	56	DT	PHOENIX	AZ	ND	33-20-00	112-03-46	500	865.6	70.2	0.3



Professional Communications Consultants, Inc., Sarasota, Florida

Modified OET-69
Service and Interference Analysis
MediaFlo™ Phoenix, AZ

Service and Interference Results:

Desired Station:

KNXV-DT 33-20-00 112-03-46 56(N) 73.000 kW-ND 866 m AMSL 90.0 %
PHOENIX AZ
LIC BLCDDT-20000120AAR
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	24642.6	3219993
not affected by terrain losses	19369.8	3208942

P27 Undesired Stations Considered:

PHOEGS 33-19-57 112-03-56 55(N) 50.000 kW-ND 840 m AMSL 10.0 %
PHOENIX AZ
APP
Using DEFAULT vertical antenna pattern

D/U IX Ratio: -23.00 dB

Summary of Interference to BLCDDT-20000120AAR

	Area (sq km)	Pop
lost to NTSC IX	0.0	0
lost to additional IX by DTV	0.0	0
total lost to broadcast IX	0.0	0
lost to additional IX by P27	160.0	14177
lost to all IX	160.0	14177
Total SERVICE	19209.8	3194765

New P27 IX as percent of
desired station population
not affected by terrain losses 0.44%

Total IX as percent of
desired station population
not affected by terrain losses 0.44%

Used 2000 Census data

Service and Interference Results (con't):

Desired Station:

KNXV-DT 33-20-00 112-03-46 56(N) 500.000 kW-ND 865.6 m AMSL 90.0 %
PHOENIX AZ
CP MOD BMPCDT-19991230ABB
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	34450.7	3234611
not affected by terrain losses	26863.0	3227535

P27 Undesired Stations Considered:

PHOEGS 33-19-57 112-03-56 55(N) 50.000 kW-ND 840 m AMSL 10.0 %
PHOENIX AZ
APP
Using DEFAULT vertical antenna pattern

D/U IX Ratio: -23.00 dB

Summary of Interference to BMPCDT-19991230ABB

	Area (sq km)	Pop
lost to NTSC IX	0.0	0
lost to additional IX by DTV	0.0	0
total lost to broadcast IX	0.0	0
lost to additional IX by P27	65.6	2895
lost to all IX	65.6	2895
Total SERVICE	26797.4	3224640

New P27 IX as percent of
desired station population
not affected by terrain losses 0.09%

Total IX as percent of
desired station population
not affected by terrain losses 0.09%

Used 2000 Census data

Service and Interference Analysis
MediaFlo™ New Orleans, LA

Proposed Station

MediaFlo NEW01A
New Orleans, LA
Channel 55

Site Coordinates: 29-58-42 / 089-56-26

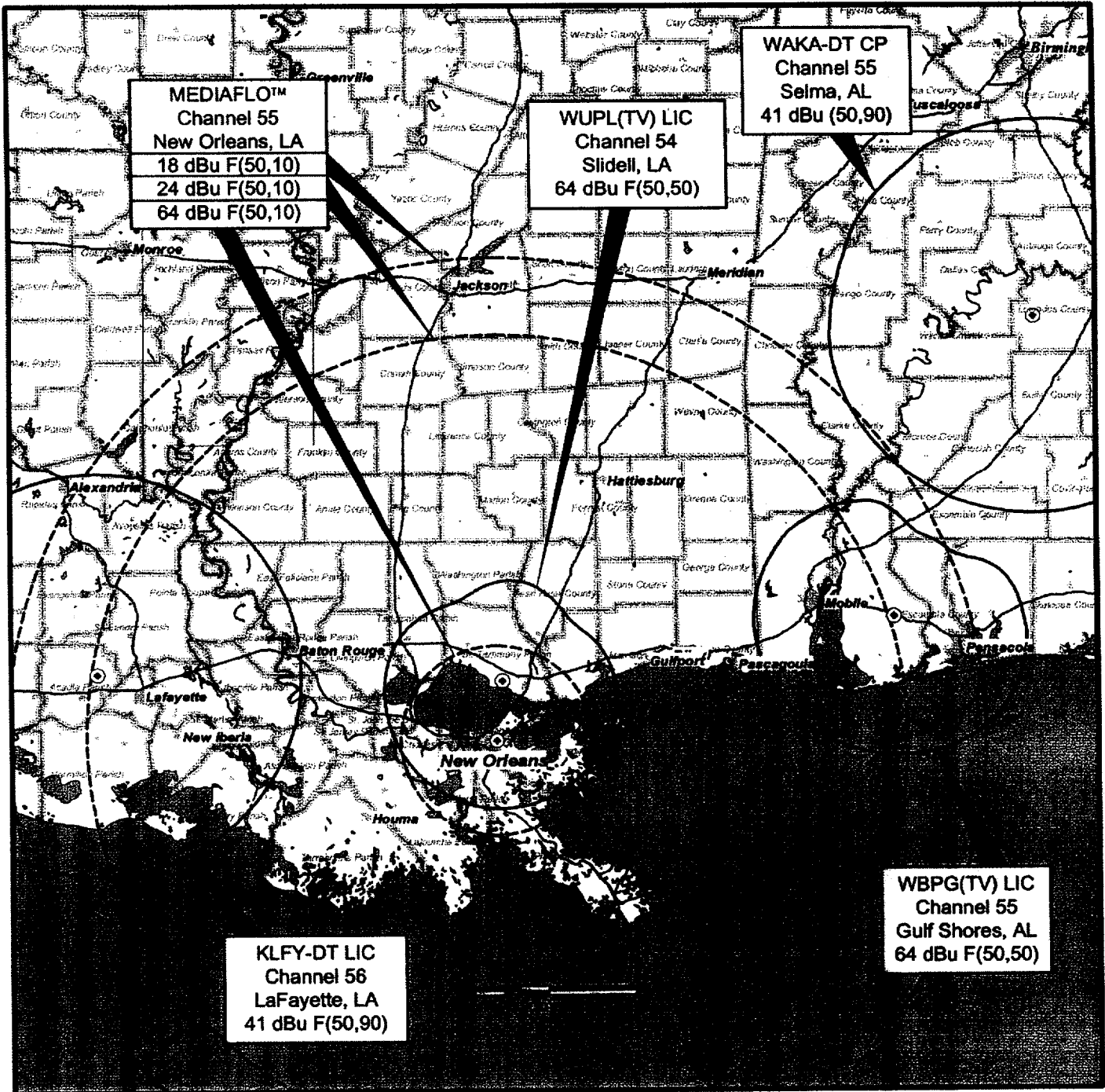
Antenna Type: Non-DA

Effective Radiated Power: 50 kW

Antenna Radiation Center: 291 m AMSL

Broadcast Stations Considered in Analysis

Call Sign	Status	Channel	Service	Community	State	Antenna Type	Latitude	Longitude	ERP (kW)	RCAMSL (m)	Bearing (deg T)	Distance (km)
WUPL	LIC	54	TV	SLIDELL	LA	DA	30-17-08	089-54-18	4370	219	5.7	34.23
WBPG	LIC	55	TV	GULF SHORES	AL	DA	30-36-40.3	087-36-26.8	3750	340	72	235.16
WAKA-DT	CP	55	DT	SELMA	AL	ND	31-08-58	086-56-51	1000	554	50.5	385.9
KLFY-DT	LIC	56	DT	LAFAYETTE	LA	ND	30-19-19	092-16-59	1000	516	280.2	228.87



STATION CONTOURS

MEDIAFLO™

NEW ORLEANS, LA

Professional Communications Consultants, Inc., Sarasota, Florida

Modified OET-69
Service and Interference Analysis
MediaFlo™ New Orleans, LA

Service and Interference Results:

Desired Station:

WUPL 30-17-08 089-54-18 54(+) 4370.000 kW-DA 219 m AMSL 50.0 %
SLIDELL LA
LIC BLCT-19950530KE
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	12148.6	1424059
not affected by terrain losses	12147.6	1424059

P27 Undesired Stations Considered:

NEW01A 29-58-42 89-54-18 55(N) 50.000 kW-ND 291 m AMSL 10.0 %
NEW ORLEANS LA
APP null
Using DEFAULT vertical antenna pattern

D/U IX Ratio: 0.00 dB

Summary of Interference to BLCT-19950530KE

	Area (sq km)	Pop
lost to NTSC IX	0.0	0
lost to additional IX by DTV	2.0	0
total lost to broadcast IX	2.0	0
lost to additional IX by P27	470.1	3674
lost to all IX	472.0	3674
Total SERVICE	11675.6	1420385

New P27 IX as percent of
desired station population
not affected by terrain losses 0.26%

Total IX as percent of
desired station population
not affected by terrain losses 0.26%

Used 2000 Census data

Service and Interference Results (con't):

Desired Station:

WBPG 30-36-40 087-36-26 55(Z) 3750.000 kW-DA 340 m AMSL 50.0 %
GULF SHORES AL
LIC BMLCT-20021009AAA
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	15521.0	931133
not affected by terrain losses	15499.0	931112

P27 Undesired Stations Considered:

NEW01A 29-58-42 89-54-18 55(N) 50.000 kW-ND 291 m AMSL 10.0 %
NEW ORLEANS LA
APP
Using DEFAULT vertical antenna pattern

D/U IX Ratio: 40.00 dB

Summary of Interference to BMLCT-20021009AAA

	Area (sq km)	Pop
lost to NTSC IX	0.0	0
lost to additional IX by DTV	582.0	7915
total lost to broadcast IX	582.0	7915
lost to additional IX by P27	49.9	1361
lost to all IX	631.9	9276
Total SERVICE	14867.1	921836

New P27 IX as percent of
desired station population
not affected by terrain losses 0.15%

Total IX as percent of
desired station population
not affected by terrain losses 1.00%

Used 2000 Census data

Service and Interference Results (con't):

Desired Station:

WAKA-DT 32-08-58 086-46-51 55(N) 1000.000 kW-ND 554 m AMSL 90.0 %
SELMA AL
CP MOD BMPCDT-20020320ACQ
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	37637.8	711176
not affected by terrain losses	36980.2	703621

P27 Undesired Stations Considered:

NEW01A 29-58-42 89-54-18 55(N) 50.000 kW-ND 291 m AMSL 10.0 %
NEW ORLEANS LA
APP null
Using DEFAULT vertical antenna pattern

D/U IX Ratio: 23.00 dB

Summary of Interference to BMPCDT-20020320ACQ

	Area (sq km)	Pop
lost to NTSC IX	391.6	3579
lost to additional IX by DTV	305.2	3354
total lost to broadcast IX	696.8	6933
lost to additional IX by P27	0.0	0
lost to all IX	696.8	6933

Total SERVICE	36283.4	696688
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New P27 IX as percent of desired station population not affected by terrain losses	0.00%
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Total IX as percent of desired station population not affected by terrain losses	0.99%
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Used 2000 Census data

Service and Interference Results (con't):

Desired Station:

KLFY-DT 30-19-19 092-16-59 56(N) 1000.000 kW-ND 516 m AMSL 90.0 %
LAFAYETTE LA
LIC BLCDT-20020501AAE
Using DEFAULT vertical antenna pattern

	Area (sq km)	Pop
within Noise Limited Contour	39287.2	1188522
not affected by terrain losses	39279.2	1188480

P27 Undesired Stations Considered:

NEW01A 29-58-42 89-54-18 55(N) 50.000 kW-ND 291 m AMSL 10.0 %
NEW ORLEANS LA
APP
Using DEFAULT vertical antenna pattern

D/U IX Ratio: -23.00 dB

Summary of Interference to BLCDT-20020501AAE

	Area (sq km)	Pop
lost to NTSC IX	0.0	0
lost to additional IX by DTV	0.0	0
total lost to broadcast IX	0.0	0
lost to additional IX by P27	0.0	0
lost to all IX	0.0	0
Total SERVICE	39279.2	1188480

New P27 IX as percent of
desired station population
not affected by by terrain losses 0.00%

Total IX as percent of
desired station population
not affected by terrain losses 0.00%

Used 2000 Census data

Service and Interference Analysis
MediaFlo™ Oklahoma City, OK

Proposed Stations

OK-ATC
Channel 55
Site Coordinates: 35-35-52 / 097-29-23
Antenna Type: Non-DA
Effective Radiated Power: 25 kW
Antenna Radiation Center: 676 m AMSL

OK-Max2
Channel 55
Site Coordinates: 35-16-58 / 097-20-18
Antenna Type: Non-DA
Effective Radiated Power: 25 kW
Antenna Radiation Center: 523 m AMSL

Broadcast Stations Considered in Analysis

Call Sign	Status	Channel	Service	Community	State	Antenna Type	Latitude	Longitude	ERP (kW)	RCAMSL (m)	Bearing (deg T)*	Distance (km)*
KOTV-DT	CP	55	DT	TULSA	OK	DA	36-01-15	095-40-32	970	684.8	73.4	170.5
KLDT	LIC	55	TV	LAKE DALLAS	TX	DA	33-00-19	096-58-59	3240	303	170.7	291.3
KLDT	CP	55	TV	LAKE DALLAS	TX	DA	32-32-36	096-57-32	5000	698	171.7	342.3
KJRH-DT	LIC	56	DT	TULSA	OK	ND	36-01-15	095-40-32	800	698	73.4	170.5

*from OK-ATC